
Hello

Institutional sanitation, Infection prevention ,Health Institution acquaired infection and Infection prevention strategy of Ethiopia

Institutional sanitation and infection

- Lesson objectives
- To Define institutional sanitation and infection prevention
- To investigate the importance of institutional sanitation
- to demonstrate Importance of infection prevention methods and benefits
- Analyzing health institution acquired infection
- To know the infection prevention strategy of Ethiopia

MEANING OF SANITATION

- Traditionally Sanitation refers to the provision of facilities and services for the safe disposal of human urine and feces.
- It is also explained as the hygiene means of promoting health through prevention of human contact with hazard of wastes (physical, microbiological and chemical).
- It involves the maintenance of hygienic conditions, through services such as garbage collection and waste disposal.

- However, the modern application of sanitation includes such other preventive interventions food, drinking water, building construction etc. (thus, food sanitation, water sanitation, building sanitation etc.).



Water, sanitation and hygiene (WASH)

- *Improving sanitation and hygiene to address stunting, diarrhea and trachoma, leveraging resources for access to water and sanitation in schools and health facilities, innovating to improve functioning of water supply*



- 65 per cent of households have access to improved water sources
- 6.3 per cent of households have access to improved sanitation
- 60 - 80 percent of communicable diseases are attributed to limited access to safe water and inadequate sanitation and hygiene services
- 70,000 under-five deaths per year due to diarrhoea
- 17 per cent of people practice improved hygiene behaviours and live in healthy environments

- In Ethiopia, 60 to 80 percent of communicable diseases are attributed to limited access to safe water and inadequate sanitation and hygiene services.
- In addition, an estimated 50 percent of the consequences of under nutrition are caused by environmental factors that include poor hygiene and lack of access to water supply and sanitation.
- There are strong links between sanitation and stunting, and open defecation can lead to fecal-oral diseases such as diarrhea, which can cause and worsen malnutrition.

INSTITUTIONAL SANITATION

- An **institution i**s a complete property and its building, facilities, and services, having a social, education, or religious purpose.
- This include schools, colleges or universities, hospitals, nursing homes, homes for the aged, jails and prison, reformations, and various types of welfare, mental and detention homes or facilities most institutions are communities unto themselves.
- They have certain characteristics in common that require careful planning, design, construction, operation and maintenance. In considering institutional sanitation certain important factors need to given prominence:

1. Site Selection

- Sub soil investigation (valley, wetland, land fill)
- Location (proximity to sources of noise, air pollution e.t.c)

2. Water supply

- Safe and potable water
- Water for fire protection
- Water for other uses e.g. sanitation, gardening

3. **Sewage disposal**
   - Sewers/waste water disposal
   - Excrete Disposal system
   - Drainages/storm water disposal system
4. **Solid waste disposal system**
5. **Food preparation and service facilities**

etc.

- For the purpose of the presentation we are going to consider the sanitation needs of university only.

Importance of institutional sanitation

- Sanitation is important for all, helping to maintain health and increase life-spans.
- However, it is especially important for children. Around the world, over 800 children under age five die every day from preventable diarrhea-related diseases caused by lack of access to water, sanitation and hygiene.

- In addition, diarrhea causes children to lose their appetites, which can lead to malnourishment. Limited access to sanitation has become such a worldwide problem that 1 in every 4 children suffer from stunted growth.
- This leads to “irreversible physical and cognitive damage.“
- Sanitation is a vital piece of health and development around the world.

Health institution-Acquired Infections

- Healthcare-Acquired Infections (HAIs), sometimes called Healthcare-Associated Infections, are infections that you get while receiving treatment at a healthcare facility, like a hospital, or from a healthcare professional, like a doctor or nurse.
- Healthcare-Acquired Infections can get into your bloodstream, your lungs, your skin, your urinary tract or your digestive tract, making you very sick. These infections are also very hard to treat and can stay with you for a long time.
- In the worst cases these infections can also be

Standard Precautions

- Standard Precautions are the minimum infection prevention practices that apply to all patient care, regardless of suspected or confirmed infection status of the patient, in any setting where health care is delivered.
- These practices are designed to both protect DHCP and prevent DHCP from spreading infections among patients. Standard Precautions include

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- Hand hygiene.
- Use of personal protective equipment (e.g., gloves, masks, eyewear).
- Respiratory hygiene / cough etiquette.
- Sharps safety (engineering and work practice controls).
- Safe injection practices (i.e., aseptic technique for parenteral medications).
- Sterile instruments and devices.
- Clean and disinfected environmental surfaces.

What Patients & Caregivers Should Do to Avoid Infection

- Make sure to wash your hands or use liquid or gel hand sanitizer;
- Make sure your medical providers wash their hands or use liquid or gel hand sanitizer before they care for you;
- Ask your nurse or doctor whether hand washing or liquid or gel hand sanitizer is best to protect you, because liquid or gel hand sanitizers do not protect you from all types of infections;
- Only take antibiotics when they are prescribed by a doctor;
- Follow your doctor's instructions for taking antibiotics, and always finish the whole prescription;
- If you are taking antibiotics or pain medication, ask your doctor or nurse if there are steps you can take to protect your digestive tract against side effects;
- Know your rights as a patient.

What Hospitals & Residential Healthcare Facilities Should Do to Protect Patients

- Ensure that all medical staff and visitors wash their hands or use liquid or gel hand sanitizer;
- Keep open wounds clean, and change dressings at appropriate intervals;
- Keep catheter and medical tube sites clean;
- Make sure that patients who are sick when they come into the facility are kept separately from other patients;
- Only prescribe antibiotics to patients who really need them, and make sure they take the whole prescription.
- Practice good antimicrobial stewardship.

What the Department of Health Does to Protect the Public

- Perform inspections of residential healthcare facilities and hospitals
- Track infection outbreaks
- Monitor rates of infection in hospitals as part or our Healthcare Quality Measurement effort

What Is Infection Prevention and Control?

- According to the World Health Organization, Infection prevention and control (IPC) is a scientific approach and practical solution designed to prevent harm caused by infection to patients and health workers
- **It means preventing and controlling illnesses that can be spread in the health-care setting**.
- The purpose of infection prevention and control is to identify and reduce the risk of infections among :

- employees
- patients
- medical staff members

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- This approach is grounded in infectious diseases, epidemiology, social science and health system strengthening.
- IPC occupies a unique position in the field of patient safety and quality universal health coverage since it is relevant to health workers and patients at every single health-care encounter.

But Why is IPC So Important?

- Well for starters, following proper IPC guidelines will put you in a position to reduce the likelihood of one of the most common health care complications: **HAIs (Healthcare-acquired infections).** A proper IPC program will reduce the risks not only for your **patients**, but your **staff** too.
- Infection Prevention and Control is paramount in nursing, **it protects both patient and healthcare worker from disease**. Without controlling the spread of infection, hospitals would become unsafe to go to or visit which would create huge healthcare problems across society.

- The principles of infection prevention described below are based on the guidelines issued by centers for disease control and prevention , Atlanta ,Georgia in 1936 are equally applicable in Ethiopia
- The guidelines involve a two level approach

1) Standard precautions , which apply to all clients and patients attending heath care facilities.
2) Transmission based precautions ,which apply to hospitalized patients and also non hospitalized patients where route of transmission is clearly known.

- To maximize the prevention of HAIs in Ethiopia, their has been a growing recognition of the need for safe infection prevention practice at all levels.
- since the publication of the second Ethiopian national infection prevention guidelines in 2012 , considerable progress has been made in understanding the basic principles, acceptance and use of evidence based (IP) practices ,including clean and safe hospital(CASH),clean care is safer care campaigns , and initiatives –saving lives through safe surgery(SALTS).
- The national infection prevention and patient safety (APPS) manual serve as standardized IP reference manual for health care providers in all health care delivery system.

The key components in the manual include:

1) washing hands before and after any procedure is the most practical procedure for preventing cross contamination (persion-persion)
2) Wearing gloves before touching anything potentially infectious and wet broken skin, mucus membrane, blood, blood fluids, secretions and excretion or soiled instruments and other items.
3) Using physical barriers including personal protective equipment, if splashes or spills of any blood, blood fluid, secretion or excretion are anticipated. Using antiseptic agents for cleaning the skin or mucus membrain prior to surgery, cleaning wounds or doing hand rubs or surgical hand scrub.
4) Using safe work practices, such as not recapping or bending needles, safely passing sharp instruments ,and disposing or sharps in puncture resistant containers.
5) Processing instruments and other items that come in contact with blood, body fluids, secretions and excretions(de contamination, cleaning and sterilization or high level dis infection).
6) Routinely cleaning and dis infecting equipment and furniture in patient care areas.
7) Disposing contaminated materials and contaminated waste properly.
8) Isolating patients only if secretions or excretions can not be contained.

- It is the responsibility of **administrators** and **health facility managers:**
  - working in conjunction with key staff (the nurses, surgeons and cleaning staff)
  - serving on operating room safety or infection prevention committees (if not already establish, form a committee including the staff from regional/zonal/woreda level and assign a focal person), to set standards for performance as per the national guidelines, guide the staff and regularly monitor staff performance and help staff at all levels “buy in” to using common sense when performing their assigned duties, as well as using appropriate personal protective equipment at all times.


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